

OWNER'S MANUAL

INSTANT POWER PLUS™ Power Source

Model No.
PS-500-1A



CAUTION:

Before first use of power source, read this manual, and follow all its Safety and Operating Instructions with every use.

Save these Instructions

Schumacher Electric Corporation
Mount Prospect, IL 60056

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**Please read this Owner's Manual before
using your INSTANT POWER PLUS™.**



**CONTAINS SEALED NON-SPILLABLE LEAD-ACID BATTERY. MUST BE
DISPOSED OF PROPERLY.**

**WARNING: Possible explosion hazard. Contact with battery acid may
cause severe burns and blindness. Keep out of reach of children.**

IMPORTANT SAFETY INSTRUCTIONS

This product contains a sealed non-spillable lead acid battery and must be recycled or disposed of properly.

WARNING:

Working in the vicinity of a lead acid battery is dangerous. Batteries release explosive gases during normal operation, charging and jump-starting. Pay special attention to cautionary markings on the battery, the engine and any equipment to be used. Read this guide completely before using this product.

IMPORTANT:

Someone should be within range of your voice or close enough to come to your aid when you work near a lead acid battery.

Have plenty of fresh water and soap nearby in case battery acid contacts skin, clothing, or eyes. If acid enters the eye area, rinse with cold water for at least 10 minutes and get medical attention immediately.

Do not smoke, use matches or cigarette lighter, or allow any spark or flame near the battery or engine.

Do not drop any metal tool on to the battery. It might spark or short-circuit the battery or other electrical part that may cause an explosion.

Remove personal metal items such as rings, bracelets, necklaces and watches when working with a lead acid battery. A lead acid battery could produce short circuit current high enough to weld a ring or the like, causing a severe burn.

Never operate the power source unit if it has received a hard blow, been dropped, or otherwise damaged. Take it to a qualified professional for inspection and repair.

Never operate the power source unit if it has a damaged lead wire or clamp. Have the lead replaced.

Never disassemble unit, take it to a qualified service professional if service or repair is required. Incorrect assembly may result in fire or electrical shock.

Place power unit as far away from the battery as the cables will permit.

CAUTION: JUMP START LEAD ACID BATTERY ONLY

Use this power source for jumping a lead acid battery only. It is not intended to supply power to a low voltage electrical system other than in a starter motor application. Do not use to jump start dry cell batteries that are commonly used with home appliances. These batteries may burst and cause bodily injury and property damage.

OPERATION

BEFORE USING POWER SOURCE

IMPORTANT INSTRUCTIONS

This product has an internal battery that requires periodic recharging. Even though the unit is fully charged before shipment, the battery charge may diminish. **Charge the unit immediately after purchase** and after each use and at least once every 3 months.

Extension Cord (Not provided)

This product requires the use of an extension cord to recharge the internal battery. Make sure that the extension cord is properly wired and in good electrical condition. Use a minimum 18 gauge cord if 25 feet or less and a 16 gauge if using a 50' extension cord.

LOW VOLTAGE BATTERY ALARM

This product has an internal battery which requires periodic recharging. This product has an audio warning device to alert you that is time to recharge. To activate the low battery alarm, push the switch marked Low Battery Alarm to the ON position. In the ON position, the alarm will sound when the battery voltage falls below 12.2 volts. The alarm can be shut off by selecting the OFF position on the Low Battery Alarm switch. The alarm will no longer sound after the battery voltage has fallen below 11.4 volts. The battery will continue to discharge if you have an external load connected to the DC receptacle and no signal will sound below the 11.4 volts.

REVERSE BATTERY AUDIO SIGNAL WITH THE ON/OFF SWITCH IN OFF POSITION.

This unit features an audio signal that sounds when the clamps are connected backwards or are touching one another (shorting). DO NOT turn the Jump-Starter ON/OFF switch ON. Reverse the connections and the audio sound should stop, indicating a proper connection.

SETTING THE CONTROLS

WARNING: Failure to follow instructions may cause damage or explosion. Read entire instruction manual before use. Always shield eyes during use. Use in a well-ventilated area.

1. Turn ignition off before connecting clamps to the battery.
2. Make sure the ON/OFF switch is in the OFF position.
3. Make sure the extension cord is disconnected if charging was taking place.
4. Turn off all electrical accessories, such as lights, radio, etc.
5. Do not put metal or loose wire across the clamps when the power is on. It may cause a short circuit of the battery that could cause an explosion.

OPERATING INSTRUCTIONS

USING AS A JUMP STARTER

1. Make sure the ON/OFF switch is in the OFF position.
2. Use safety glasses to shield eyes while making the connections.
3. Connect the Red (+) Positive clamp to the Positive battery post first.
4. Connect the Black (-) Negative clamp to the engine or chassis to ground.
5. If the unit alarm is sounding, the leads are connected wrong or shorted. Change the connections.
6. If after making the connections, the audio sound is not present, turn the ON/OFF switch to ON position.
7. Crank your vehicle's engine. If the engine fails to start, wait 3 minutes for the battery to cool down and try again.
8. After the engine starts, turn the ON/OFF switch to OFF position. Disconnect the Black (-) clamp from the engine or chassis and then disconnect the Red (+) clamp from your vehicle's battery post.

USING THE EMERGENCY FLASHING LIGHT

The red emergency light located on the top left side of the unit can be started by pushing the ON/OFF switch located below the red light. This light is a flashing light. To stop the light simply push the switch to the OFF position.

USING THE WHITE SPOTLIGHT

The spotlight is located on the top right side of the unit. This light can be adjusted downward by pulling the tab at the top. The control switch for this light is located beneath the light.

LED LIGHTS

Four LED lights are on the front panel and will indicate the internal battery status condition when the square red switch is pushed. The charger should not be on at this time.

1. **The 1st red LED indicates a very low battery nearing 0%. The battery should be recharged immediately.**
2. **The 2nd red LED indicates the battery condition is below 12.5 or 25% or less and should be recharged.**
3. **The yellow LED lights indicating the voltage is between 12.5–12.7 or 50–75% and can be used but should be recharged soon.**
4. **The green LED indicates full charge.**

12-VOLT DC RECEPTACLE (FRONT)

This unit has an internal sealed lead acid battery. It may be used as a DC power supply for any 12 volt electric appliance with a male cigarette lighter plug. To obtain power, plug the 12-volt appliance with a maximum rating not exceeding 15 amps into the front DC receptacle. The front receptacle has a circuit breaker in series with the receptacle to protect it.

If the amperage of the appliance exceeds 15 amps into the DC receptacle, the internal circuit breaker will begin to cycle on and off. If this happens, you should disconnect the appliance immediately.

Do not use the receptacle on the back of the unit for anything other than a power inverter.

12-VOLT POWER INVERTER RECEPTACLE (BACK)

The 12-volt receptacle on the back is for connection of a power inverter only. DO NOT use this receptacle for 12-volt electric appliances. It is recommended to stay under 300 watts load on the inverter. The inverter should be rated at a higher rating than the 300 watts (Example: 350 or 375 watts). The back receptacle has a circuit breaker in series with the receptacle to protect it. To reset, push the button on the circuit breaker switch located next to the back receptacle.

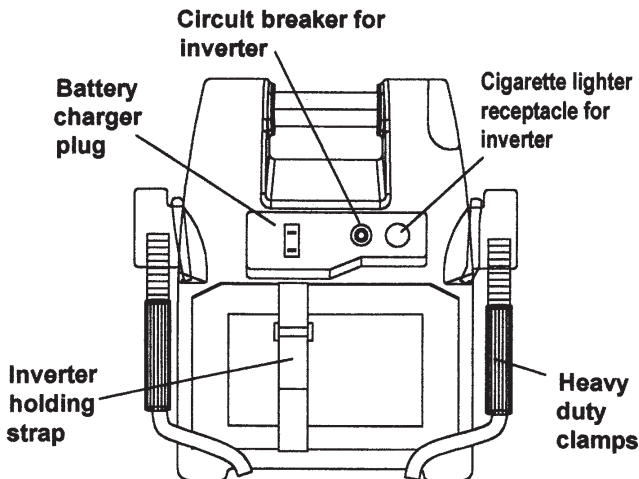
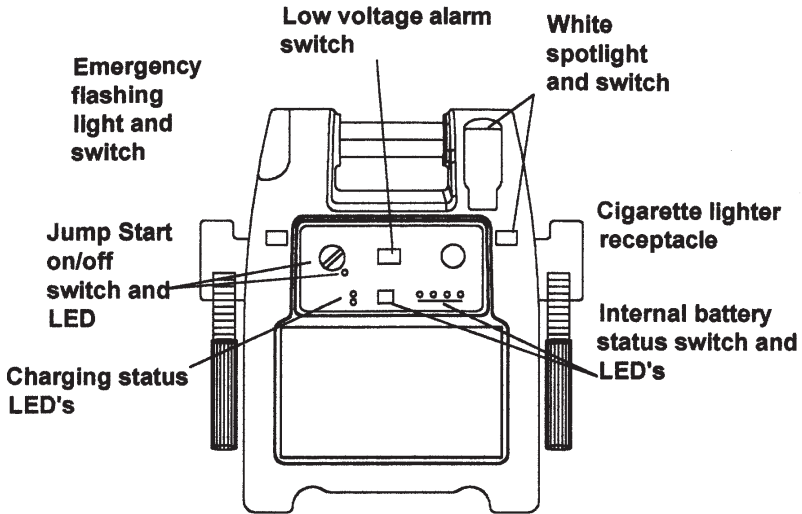
POWER INVERTER MOUNTING

The power source unit provides for mounting a power inverter to the back of the unit. Using the provided hook and loop strips cut to the size of the inverter bottom. Secure the strips to the bottom of the inverter and the back of the power source unit. Then strap the inverter in place with the strap provided located on the back door. Plug the cigarette lighter plug of the inverter into the receptacle of the power source on back.

STORAGE

Make sure the ON / OFF switch is in the OFF position when storing this unit. If left in the ON position, the clamps could spark if they come in contact with each other causing a short circuit which may cause the battery to explode.

For best operation, store at room temperature. Storing in extreme temperature conditions causes the battery to discharge quicker and reduces the starting power of the unit.



For Information about troubleshooting:

Call toll-free from anywhere in the U.S.A.
7 am to 4:30 pm CST Monday through Friday

1-800-621-5485

LIMITED WARRANTY

Schumacher Electric Corporation warrants your unit to be free from defects in material and workmanship, excepting abuse or misuse, for a period of one year from the date of sale to the original user or consumer purchaser. If your unit malfunctions or fails within the first 30 days of the warranty, we will replace it with a new unit. If your unit malfunctions or fails within the 12-month warranty period because of a defect in material or workmanship, we will repair it without charge.

The internal battery, excluding units with swollen batteries or melted battery terminals, carries a 90-day warranty from the date of purchase. Proof of purchase required. All battery replacements will be at the sole discretion of the manufacturer or his designated agents.

This warranty is in lieu of all other express warranties. The duration of any implied warranty, including but not limited to, any implied warranty of merchantability or fitness for a particular purpose made in respect to your unit, is limited to the period of the express warranty set forth above.

For warranty service, return your product, with battery as well as proof of purchase to the factory or a designated agent:

Schumacher Electric Corporation, Warranty Service Department
1025 Thompson, Hoopston, IL 60942
Phone: 800-621-5485 (Hours: 7 a.m. - 4:30 p.m. CST)

You will be responsible for all insurance and freight or other transportation charges to the factory or point of repair. We will return your unit freight prepaid if repair is covered under warranty. Your unit should be properly packed to avoid damage in transit since we will not be responsible for any such damage.

In no event shall Schumacher Electric Corporation be liable for consequential damages. Some states do not allow limitations on the length of the implied warranty or the exclusion or limitations of incidental or consequential damages, so the above limitations or exclusions may not apply to you. This warranty gives you specific legal rights and you may also have other rights, which may vary from state to state.

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